

AMERICAN INTELLIGENCE.

ORIGINAL COMMUNICATIONS.

A New Instrument for Craniotomy. By LEWIS D. HARLOW, M. D.—This instrument, Figs. 1 and 2, which I have named the cranio-diaclast (signifying an instrument for *breaking through* the skull), or, more briefly, the *diaclast*, is unlike any other heretofore in use, as will be seen by the following description.

The handle and shank are similar to those of the common trocar, differing only in respect to size, and are, when measured together, eleven inches in length. But the chief peculiarity of the diaclast is that portion used for perforating the head.

This consists of a large cone-shaped screw, resembling in form a boy's top, with which every one is familiar. Its length, and the diameter of its base are *equal*, each being one inch or a little less.

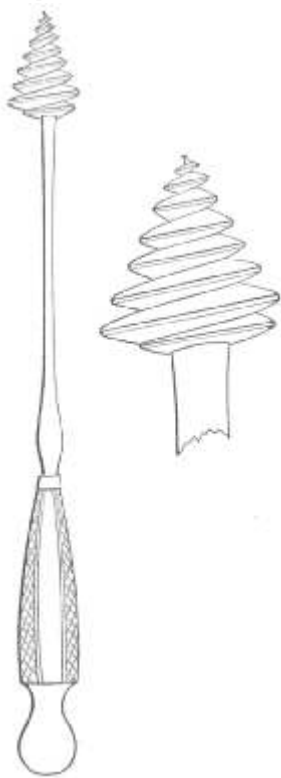
The threads of this spiral cone, or conoid screw, are small and near together just at the point, but increase regularly and rapidly, in size and distance, and become rounded and smooth as they wind from the apex to the base. They present, therefore, no sharp, cutting edges, by which the soft parts of the mother can possibly be wounded; the point only requiring to be guarded until brought in contact with the child's head.

The small end is like that of a common pointed screw, and is made of the best tempered steel. It readily penetrates the cranium by a semi-rotary, drilling motion, and enters, by a few facile turns, wholly within the cavity. This entrance is effected (after the penetration of the point) by the mechanical power of the screw alone; as the spiral beyond the point has no *cutting* edge; but that power has been proved experimentally to be amply sufficient.

As it makes its way through the skull, the bone is broken in pieces, and the fragments are forced asunder, as if the head were being riven by a wedge. Its withdrawal in a direct line requires considerable force, but has the advantage of still further breaking up the bones and leaving in the cranial vault a large open rent, through which the craniotomy forceps can, without difficulty, be passed.

Fig. 1.

Fig. 2.



(CRANIO-) DIACLAST.

FIG. 1.—View of instrument, reduced size.

FIG. 2.—Screw, natural size.

On making trial of this instrument upon well ossified heads of stillborn children, it was found to penetrate, with the greatest ease, the base of the skull or the face, at any point, and separate the fractured pieces, at the will of the operator; thus showing its perfect adaptation to cases of breech-presentation (after the body has been delivered), and of face-presentation, when these are complicated with so great pelvic deformity as to render embryuleia unavoidable.

The advantages of the diaclast may be summed up as follows:—

1st. It is simple in construction.

2d. It is perfectly safe.

3d. It may be used with the greatest facility.

4th. It is efficient and adapted to all cases.

Luxation of the Femur of fifteen days' standing reduced by Manipulation. By J. M. IRVINE, M. D., of West Barre, Hunt County, Pa.—I was called, January 21, 1859, to see a maiden lady, 68 years of age, who, fifteen days previously, had slipped and fallen on her right limb, which caused it to swell and become intensely painful, the pain being located in the hip-joint. A practitioner was called in who pronounced it a sprain of the hip-joint, and ordered an anodyne liniment to be applied to the part, and left the case to nature. The pain continuing unabated I was called in and found the limb shortened fully three-fourths of an inch, everted, and the head of the femur over the pubis and pushed under Poupart's ligament.

I administered by inhalation a mixture of equal parts of sulphuric ether and chloroform until the patient was under the influence of the anæsthetic. I then proceeded to flex the leg on the thigh, and the thigh on the pelvis. After carrying the knee over the umbilicus I carried it over to the left side of the body and brought the limb into a state of extension, when the head of the bone immediately slipped into the acetabulum with an audible snap.

Case of Ruptured Uterus. By NATHAN S. KING, M. D., of Bloomfield, N. J.—Mrs. Mary V., aged 31 years, a native of Ireland, a strong, robust looking woman, about two weeks before her confinement applied to me to attend her. She stated that she had given birth to three children at full time, but that from some deformity of her pelvis her labours had all been difficult, having to be terminated by the use of the forceps, and the children all being dead. She said she was advised by her last physician that if she ever again became pregnant to have labour produced at seven months. A few days after I called, and, making an examination, found the antero-posterior diameter somewhat diminished, the projection of the promontory of the sacrum increased, and an increase downwards of the inclination of the pubis. She had at this time the premonitory symptoms of labour. I was able easily to make out a natural presentation. I left, merely giving her some general directions. At 7 o'clock the next evening (Oct. 24), I was summoned in haste to Mrs. V. I found the contractions of the uterus violent and almost continuous, the os uteri well dilated, but the membranes not yet ruptured, and the head of the child resting firmly on the os pubis, not yet having engaged in the superior strait. Her bowels had been well opened during the day and she had continued to urinate freely. The pains still continuing severe, and no change being perceptible in the position, I soon placed her on her back, ruptured the membranes, and with my hand endeavoured to depress the head from the pubis, but with no success. The pains continued violent, almost throwing the patient